CHAPTER 3

INTERNAL MIGRATION AND HOUSEHOLD WELL-BEING: MYTH OR REALITY

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1. INTRODUCTION

Poverty in Pakistan is largely a rural phenomenon, and lack of a stable source of income, landlessness, skewed distribution of land, droughts and low human capital are the main causes of rural poverty. More than half of the rural households in Pakistan are landless. These households as well as small farmers are vulnerable to fluctuations in the demand for labour, wage rates, and food prices. Rural-urban migration facilitates removal of excess labour that cannot be absorbed in agriculture, and that out migration may help reduce pressure on the land. The development literature has discussed the rural to urban migration extensively not because of its quantitative importance but because of its close association with economic transformation and with the transfer of the country's labour force from agriculture to non-agriculture. However, in Pakistan, migration within the rural areas and between the urban centres has also been significant quantitatively. Effects of internal migration on households may vary according to the type of move e.g. rural-rural or rural-urban.

Internal migration has not been extensively researched in Pakistan primarily because of the data scarcity. During the last two decades several household surveys have generated reliable data to study reproductive health, child mortality, poverty, employment and child schooling. But migration, particularly within the country (internal) has not been the focus of these surveys. Population censuses have historically been the major source for understanding the direction and reasons for internal migratory flows. The last population census was carried out in 1998 after a gap of 17 years, and ironically it did not identify the place of birth of lifetime migrants by rural and urban areas, thus making it impossible to analyze the direction of internal migratory flows. After the 1979 Population, Labour Force and Migration (PLM) survey, no major survey concerning migration could be carried out. However, few rounds of the labour force surveys (LFS) and the 1998-99 Pakistan Integrated Household Survey (PIHS) included very brief but useful module on migration focusing on the duration of residence with information on place of birth. These surveys have been used in some recent studies (Khan and Shahnaz, 2000; Akram et al., 2002).

A close look at the literature on internal migration shows that it has primarily focused on the incidence of migration, direction of migratory flows, factors affecting

the decision to migrate and earnings of migrants and non-migrants.[1] The 1998 census data has been used to determine inter- and intra-provincial flows of population movements during the intercensal period[2]. The socioeconomic effects of internal migration have rarely been studied in Pakistan. Irfan (1986) appears to be an exception who has examined the effects of internal migration (out-migration only) on fertility, economic activity and income distribution. Little is known about the effects of migration on the well-being of families. This study is designed to fill this gap. It has examined the effects of internal migration on household well-being measured by per capita household consumption on food and non-food items, infant mortality and child malnutrition using the 2000-01 Pakistan Socio-economic Survey (PSES) carried out by the Pakistan Institute of Development Economics with the financial assistance from the International Development Research Centre (IDRC), Canada. It is a multipurpose survey that contains a comprehensive module on internal migration.

Infant and child mortality rates are widely considered as good indicators of the overall health and socio-economic status of a country's population. Children mortality in Pakistan accounts for about three-fourths of the total deaths, and the reduction in infant and child mortality has been very slow, particularly during the last two decades. Similarly no real improvement has been observed in child nutrition during the last two decades.

Migration is a dynamic process. It is often an available option of the poor as they lack financial and social resources it requires to live at their places of origin. However, it is argued that overall effects of internal migration in Pakistan on the household well-being indicators (consumption level, infant mortality and nutrition) may not be substantial for several reasons. A great majority of migrants move to rural areas, where employment opportunities are limited and wages are low. Thus even a long stay at the rural destination may not be effective for the well-being of these migrating households. Migrants who move to urban areas are usually absorbed in the informal sector, live in urban slums and work in low paid jobs (Sadaqat, 1992). One common observation is that many poor families have moved to large cities, where their female members work as domestic workers on very low wages. They live in very poor conditions in slums.

This paper is divided into seven sections. The next section presents a review of the recent literature on internal migration in Pakistan while data sources and method of analysis are discussed in section 3. Incidence and patterns of internal migration are examined in section 4, followed by a discussion on socio-demographic characteristics of the sample population in section 5. The relationship between migration and household well-being is determined in section 6. Summary is presented in the final section.

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[1] See for example, Afzal, 1967; Mujahid, 1975; Afzal and Abbasi, 1979; Irfan, Demery and Arif, 1983; Shah, 1986; Selier and Karim, 1986; Ahmed and Sirageldin, 1994; Khan and Shahnaz, 2000; Akram et al 2002.

[2] See for example, Afzal, 1967; Afzal and Abbasi, 1979; Irfan, Demery and Arif, 1983; Shah, 1986; Ahmed and Sirageldin, 1994; Khan and Shahnaz, 2000; Akram et al 2002.

2. LITERATURE REVIEW

The review of literature presented in this section has focused on studies carried out more recently. These studies are based either on the 1998 population census data or surveys carried out the last decade. The contribution of earlier studies in understanding the phenomenon of internal migration is well documented (Afzal, 1967; Shah, 1986; Selier and Karim 1986; Ifran, Demery and Arif, 1983; Ahmed and Sirageldin, 1994). Because of the gap of 17 years between 1981 and 1998 censuses and lack of major surveys on migration, the decade of 1990s witnessed very few studies on internal migration in Pakistan. These studies are reviewed here.

Karim and Nasar (2003) used the 1998 population census data to analyze the inter-provincial and inter-district patterns of migration in Pakistan. The census provides detailed information about the place of birth and the place of enumeration of each individual living outside his/her place of birth. Of the total lifetime migrants in the country over half were inter-district migrants, about one fourth had migrated form other provinces and about one-fifth had migrated from outside Pakistan. The study shows that compared to the 1981 census, the volume of migration during the past ten years has increased slightly. However, the percentage of migrants in the total population has declined. One major reason for the reported slowing down could be the inherent weaknesses of criteria defining as migrants those who crossed a district's boundaries. For this reason intra-district migration is not recorded. The percentage of long-term (>10 years) migrants is very high in the urban area of Punjab and Sindh and fairly low in the urban areas of NWFP and Balochistan. Recent migrants (< 10 years) are more educated than non-migrants or long-term migrants. Over half of the recent migrant category in urban areas is in administrative and other related services. One major weakness in the 1998 census data is non-availability of information related to rural/urban migration. It therefore is not possible from the 1998 census data to examine the rural-urban direction of movements.

Four separate studies that have prepared socio-economic and demographic profiles of provinces have also discussed internal migration using the 1998 census data. Khatak (2004) used the 1998 census to examine migration pattern in NWFP. The study shows that the total number of life-time in-migrants in NWFP was 647,356 (3.7 percent of the population of NWFP). Of the total migrants 68.6 percent came from other districts of NWFP; 14.9 percent were from Sind, NWFP, Balochistan and Islamabad; 12.8 percent from FATA; 0.8 percent from Azad Kashmir and Northern Areas; while the remaining 2.9 percent were Pakistanis repatriated from other countries. Of the 'life-time' migrants in NWFP nearly 50 percent moved at least 10 years ago and 15 percent shifted their residence during a year preceding the 1998 Census date. Most of the migrants came to the present residence between age 10 to 35 years. They are generally matriculates or intermediate certificate holders. A great majority (68.0 percent) of the migrants moved with their head of the household as spouse and children; around 20 percent migrated for seeking jobs or they were transferred while on job; 10 percent moved because of marriage, mainly females; and about 8.4 percent changed their district of residence for business purposes.

Chaudhry (2004) utilized the 1998 census to examine the migration patterns in Balochistan. The analysis shows that there were 1.79 million migrants across the provinces or almost one third of the total internal migrants who moved from one province to another. Balochistan received 0.1 million or 5 percent. Slightly less than a half, 47.4 percent, of the inter-provincial migration originated from Punjab. The inter-provincial migration from Balochistan comprised 0.11 million (6 percent) of the total inter provincial migrants, half of which settled in Sindh and the other 48 percent in Punjab. In Sindh, 5 percent and in Punjab 15 percent migrants came from Balochistan. In Balochistan 58 percent of migrants came to settle from Punjab, 31 percent from NWFP and FATA and 11 percent from Sindh.

Naeem (2004) examines the migration patterns in Punjab using the 1998 census. An overwhelming proportion of the population of Punjab (90.89 percent) was enumerated within the same province and same district as of their birth. There were 9.1 percent migrants. About two-thirds of those who were enumerated in different districts were within the same province. The trend of losing population from out-migration has continued. Similarly, the recent migration data pertaining to migrants with less than ten years of continuous residence also indicate that the number of migrants originating from Punjab to other provinces is higher compared to those who had Punjab as destination from other provinces.

Rukanuddin and Chaudhry (2004) used the 1998 census to see migration patterns in Sindh. The size of the internal migrants in 1951 was about 1.4 million and it gradually increased to 8.37 million in 1998.[3] The problem of large scale movement across the international boundary between the two neighboring countries has not only upset the refugees coming from India but it appears that the fear of massacre compel the people living in bordering districts to move to interior districts for safety. Around two-thirds of internal migrants move within their own province of birth where as one-third cross their province of birth mainly for economic reasons.

Khan and Shahnaz (2000) conducted a detailed study on determinants of internal migration in Pakistan by using the Labour Force Survey for 1996-97. Their statistical analysis showed that the migrant population was mostly composed of males and females who undertook the decision to migrate for non-economic motives. However, this pattern was more evident in the predominant urban-urban migratory flow than in the rural-urban migratory flow. They found reversal of the main direction of migration from rural-urban direction to the urban-urban direction. They also found that the migration decision was positively linked to the human capital embodied in the individual. They also found that the migration decision was positively linked to the human capital embodied in the individual. They found a significant positive effect of education in terms of years of schooling coupled with the positive effect of technical and vocational training on the probability of migration for both males and females. Urban residence and residence in the province of Punjab positively affected the probability of migration in their study.

Akram et. al., (2001) examine the factors which influence migration decision using 1998-99 the Pakistan Integrated Household Survey (PIHS). Their analysis was based on the male sub-sample of Punjab province, which had the highest proportion of

[3] Lifetime migrants borne in foreign countries are excluded. Internal migrants constitute 77.3 percent of the total lifetime migrants (Rukanuddin and Chaudhry, 2004).

male migrants. To examine the direction of migration, Akram et al., carried out a multivariate analysis. The dependent variable in the model was categorized into five mutually exclusive categories. They assume that a male in Punjab chooses amongst different mutually exclusive and exhaustive alternatives available to him. These include: the physical movement of an individual along with the change of residence from rural to urban areas (RUM) for any reason across the administrative district, secondly, the physical movement of an individual along with the change of residence from urban to rural areas (UUM), thirdly, the physical movement of an individual along with the change of residence from rural to rural areas (RRM), fourthly, the physical movement of an individual along with the change of residence from urban to rural areas (URM) and finally, when the individuals decide to stay at the place of birth means no migration (NM). In Punjab the main direction of migration is rural to urban followed by rural to rural migration. For economic reasons the rural to urban migration flow is followed by urban to urban migration flow. It means, that large scale rural-urban migration is not only due to provision of better employment opportunities in the urban centres but also due to the accelerated investment in the fields of education, health, transport and communication sectors in urban areas. The important findings about the per capita income show the earnings differential prevailing between the rural and urban areas and the availability of better job opportunities in the urban areas of Punjab. The other major finding of the paper is that people belonging to the agricultural occupation are moving from one rural area to another, showing that certain areas of the Punjab are more developed than the others, that is why people are migrating towards those areas.

Mann (2003) examines the role of internal migration in affecting multiculturalism in Faisalabad, the third largest city in the country. The paper starts with the description of a brief historical background of Faisalabad, both urban and rural areas, then deals with the issue of migration and multiculturalism in the region and ends with conclusions and policy implications. Migration, a demographic process, is one of the most important factors for cultural pluralism at the place of destination. Like other areas of Pakistan, the population of Faisalabad region was disturbed during the largest Muslim migration from India to Pakistan during 1947. This demographic process, especially rural-urban migration and outward in-migration in the city has changed and is continuously changing the physical, social and cultural structure of the city and villages in terms of number of houses, number of people, familial, economic, educational, political and all other important aspects of rural and urban cultures in Faisalabad region. Migration has given birth to multiculturalism leading the society towards a changing direction of life in Faisalabad region in general and Faisalabad city in particular. Earlier Karim (1984) did a similar type of study for Peshawar city in NWFP.

Sadaqat (1992) shows that majority of migrants to Karachi settle in Katchi Abadis. This settlement is one of major reasons for the expansion of the city. An additional burden is placed on the already limited resources of the city. She argues that overall employment of an area of origin does not significantly affect migration out of it. The popularly held view that improving the levels of employment in areas from which out-migration is more may be successful in limiting migration to large urban areas is not supported by the results of this research.

Despite scarcity of data, the reviewed recent studies have considerably contributed in understanding the volume, nature and patterns of internal migration. However, there is a gap in terms of the effect of internal migration on the well-being of households, which is the main objective of this paper.

3. DATA SOURCE AND METHOD OF ANALYSIS

As noted earlier, the major data source for this study is the 2000-01 PSES. The sample size and issues related to its representativeness have been discussed by Arif (2004). This section explains the nature of internal migration data contained in the PSES and method of analysis. The migration module of the PSES has three sub-modules concerning in-migration, return migration and out migration. It is possible to identify all members of the sampled household enlisted in these sub-modules according to a four-fold classification; in-migrants, return-migrants, out-migrants, and non-migrants. The migration sub-modules provide information on place of birth or destination with duration of continuous residence. However, data on place of birth or previous place of residence classified into urban and rural areas are available only for in-migrants, the largest category of internal migrants. In-migration has been the major focus of this study as well, although other categories of migrants have also been discussed in detail. Analysis has been carried out at two levels. To examine the incidence, patterns and reasons for migration, individuals are the unit of analysis. To examine the effects of internal migration on the well-being of migrant families, migration status of the head of household is used to classify households into different categories of migration.

Infant Mortality Rate (IMR) refers to the number of deaths to children under 12 months of age per 1,000 live births. The IMRs in the present analysis are estimated on the basis of total births occurred in the 10 years preceding the PSES. There are three commonly used anthropometric measures that offer a comprehensive profile of malnutrition: stunting, underweight and wasting. This study, however, has focused on stunting and underweight. For each of these two measures, we compute the Z-score based on standard growth charts, and use this score as an indicator of the nutritional status of the child. The term "stunting" is used to describe a condition in which children fail to gain sufficient height, given their age. Stunting is therefore an extremely low "height-for-age" (H/A) score. Stunting is often associated with long-term factors such as chronic malnutrition, especially protein-energy malnutrition, and sustained and frequent illness. It is therefore an indicator of past growth failure and is often used for long-term planning of policies and intervention programs in non-emergency situations. The term "underweight" is used to describe a situation where a child weighs less than expected, given his or her age. Underweight is thus an extremely low weight-for-age" (W/A) score. Unlike height, weight fluctuates over time and therefore reflects current and acute as well as chronic malnutrition. The most common cutoff point, –2Z-score, i.e., two standard deviations below the median values of the international reference, is used in the analysis.

4. MIGRATION IN PAKISTAN: INCIDENCE, PATTERNS AND REASONS

4.1. Incidence of Migration

Table 1 sets out data the distribution of the PSES sample population by migration status. Migrant population constituted about 12 percent of the total population. Approximately two-thirds of the migrant population (7.6) is accounted for by the in-migrant category.[4] The second largest category was the out-migrant (within country and overseas). A relatively small proportion of population was in the return migration category. These results are not strictly comparable with other sources because of either definitional differences or because of difference in the reference period. For example, the 1998 population census provides information on lifetime migrants, and it shows that 8.2 percent of the total population was lifetime migrants. The PSES data on first two categories, as shown in Table 1, in-migrants within country and from outside country, are largely comparable with the census definition of lifetime migrants. The two-sources, the 1998 census and 2000-01 PSES, show respectively that 8.2 and 7.6 of the total population was lifetime migrants. Three-quarters of these migrants, according to both sources, were originated from within the country.

Table 1 also compares the PSES data with the 1979 PLM data. Despite difference in reference period[5], these two sources have also produced similar results in terms of in-migration and out-migration. It thus appears that the PSES has generated migration data that is fairly comparable with either the census data or with the earlier large surveys, such as the PLM.

Table 1
Percentage Distribution of Population by Migrations Status and Rural-Urban Areas

Migration Status	% distribution of population (all ages and both sex)			% female in total	PLM (1972-79)
	Urban	Rural	Total		
Non-migrant	82.4	91.2	88.4	49.4	89.20
In-migrant with country	10.7	3.7	6.0	59.2	5.92
In-migrant outside country	3.0	0.9	1.6	42.9	-
Return migrant within country	0.5	0.6	0.5	17.6	1.09
Return migrant outside country	0.3	0.1	0.2	6.6	-
Out-migrant within country	2.2	2.9	2.7	27.8	3.31
Out-migrant outside country	1.0	0.6	0.7	22.1	0.48
Total	100.0	100.0	100.0	49.0	100.0

Source: PSES 2000-01

[4] The term in-migration (or in-migrants) used in this paper is similar to the term lifetime migration (or lifetime migrants) since both consider a person as a migrant if his/her place of birth is different from current place of residence.

[5] PLM refers to migration between 1972 and 1979.

Female dominates in the in-migration category while in other categories male's share was larger than the share of females. Even in out-migration categories, the female share was considerable (28% within the country and 22% in outside the country category). Rural-urban classification of the sampled population gives some additional information about the migrants. In-migrants were found in great proportion in urban areas of the country while the origin of many out-migrants was from the rural areas.

4.2. Pattern of Migratory Flows

In order to examine the pattern of migratory flows, this study has relied on in-migration, the major category of migration, which provides information on place of birth classified into urban and rural areas. This classification is not available in the case of return migration. Data on four possible directions of internal migration - urban to urban, urban to rural, rural to urban and rural to rural - are presented in Table 2. Data from other sources are also presented in this table for comparison. According to the PSES, migration has been mainly in the direction of rural to urban (39%) and rural to rural (36%). Abut one-fifth of internal migrants (in-migrants) moved from one urban area to other centres. Movement from urban to rural areas was only 6 percent of the total volume of in-migration. This stream is the least quantitatively important among the four classifications identified, and is reflective of labour circulation rather than migration (Irfan, Demery and Arif, 1983).

Although the 1998 PIHS data given in Table 2 refers to only male migration in Punjab, it corroborates the PSES findings. More than 40 percent of the total migratory flow, according to the PIHS, was from rural to urban areas and 30 percent between rural areas. Shares of urban to urban and urban to rural movements in total migration, as shown by the PIHS, are also comparable with the PSES. However, the LFS 1996-97 shows that migration has been mainly in the urban to urban direction followed by migration in the rural-urban direction. However, it is worth noting that LFS data excludes children less than 10 years old. The 1979 PLM indicates rural-rural as the dominant move in internal migration. The share of urban to rural migration was also higher in the PLM compared to other data sources. Despite these differences in the patterns of migratory flows, the emerging consensus is that three types of flows – rural-urban, rural-rural and urban-urban – are quantitatively significant.

Table 2
Percentage Distribution of Internal Migrants by Direction of Move

Direction of move	2000-01 PSES (all ages-both sexes)	1996-97 LFS (age 10+ - both sexes)	1998-99 PIHS (Male-Punjab) both sexes	1979 PLM* (all ages – both sexes)
Urban-urban	19.5	43.0	22.7	14.9
Urban-rural	5.9	6.9	6.8	13.9
Rural-urban	38.8	29.8	40.7	29.8
Rural-rural	36.2	20.3	29.7	41.3
All	100	100	100	100

Source: PSES 2000-01
*Includes out-migrants as well.

Table 3 shows that the proportion of female is lowest in rural to urban migration and highest in rural to rural migration. Approximately two-thirds of rural-rural and urban-rural migrants comprised of females. Table 3 also compares more recent migrants with old migrants across the direction of move. There appears to be a tendency towards rural to rural migration on the cost of rural to urban and urban to urban directions. Among the recent migrants, the share of female was very high, more than 75 percent.

Based on the PLM survey, Irfan, Demery and Arif (1983) observed a relatively large fraction of rural-urban migrants cross provincial boundaries, with two thirds of such migrants from NWFP, one thirds from Balochistan and one fifth from Punjab ending up in other provinces. The sample size of the PSES is not sufficient to control for the province level analysis.

Table 3
Percentage Distribution of Lifetime Migrants by
Direction of Move and Duration of Migration

Direction move	Duration of residence				Total	% female
	≤ 5 years (recent migrants)	% female	6+ years (old migrants)	% female		
Urban-Urban	23.1	77.5	19.0	51.0	19.5	54.8
Urban-Rural	6.7	64.1	5.4	63.9	5.6	63.9
Rural-Urban	32.6	77.0	30.6	48.2	38.8	51.2
Rural-Rural	37.6	74.9	36.0	63.7	36.2	65.2
Total	100.0	75.5	100.0	55.2	100.0	57.6

Source: PSES 2000-01

4.3. Reasons for Migration

Table 4 presents data on distribution of male and female migrants by direction of move and main reasons for migration, grouped into two broad categories: economic and non-economic. This grouping is in line with the classification done recently by Khan and Shahnaz (2000). If the migrant identified job transfer, finding a job, education or business as the main reason for migration, then such migration is based on reasons which can be classified as economic reasons and the migrants as economic migrants. This type of migration is viewed a an investment in human capital which entails both direct and indirect costs as well as the expectation of returns in the form of increased earnings in the destination. Marriage, accompanying parents or return to the origin can be classified as migration for non-economic reasons and the migrants as non-economic migrants under the pretext that the decision is not based upon a comparison of costs and return but on other criteria which may not be primarily economic.

Majority of the males (61 percent) have cited economic reasons as the main reason for migration (Table 4). In case of females, marriage and joining family are the most important reasons for moving from one place to another. More than two-thirds of female migrants changed their place of residence because of marriage (not shown in

Table 4). The analysis of main reasons for migration by the direction of migration indicates that more than 70 percent of male migrants from rural to urban areas were economic migrants. This proportion of economic migrants is higher than urban-urban flow, where more than fifty percent of male migrants moved for non-economic reasons mainly to join family. It is interesting to note that proportion of female who moved because of economic reasons in rural-urban and urban-rural migration was 17 and 14 percent respectively. These percentages are substantial. Further research is required.

Table 4
Percentage Distribution of Migrants by Reasons for Migration

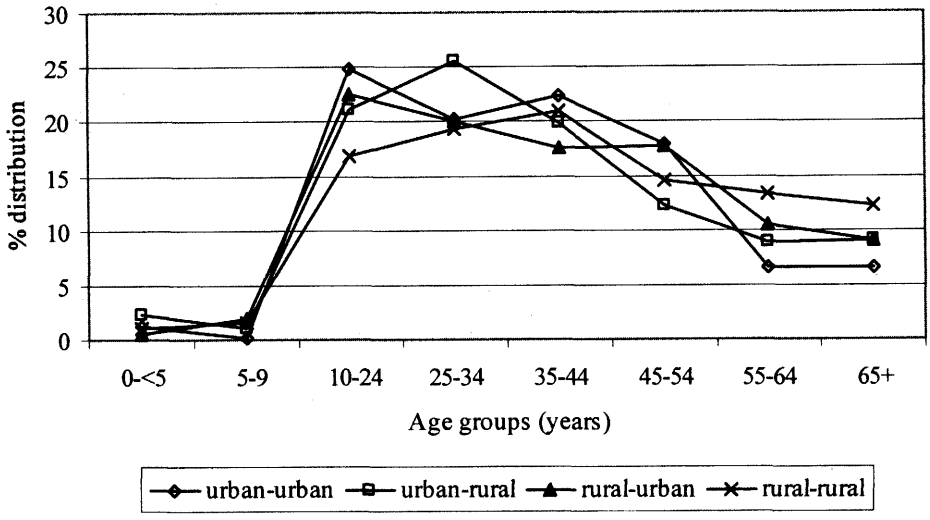
Migration direction	Non-economic	Economic	Total
Male			
Urban-Urban	55.2	45.8	100.0
Urban-Rural	48.1	51.9	100.0
Rural-Urban	28.9	71.1	100.0
Rural-Rural	42.4	57.6	100.0
Total	39.3	60.7	100.0
Female			
Urban-Urban	89.9	10.1	100.0
Urban-Rural	85.8	14.2	100.0
Rural-Urban	83.0	17.0	100.0
Rural-Rural	91.5	8.5	100.0
Total	88.0	12.0	100.0

Source: PSES 2000-01

5. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF MIGRANTS

Migrants are generally regarded to be younger and better educated. These two characteristics with occupation and earnings have been discussed in this section. Age distribution of migrants by direction of move is shown in Figure 1. Age-sex profile of migrant population by direction of move is presented in Appendix Table 1. Figure 1 shows the relationship in the shape of an inverted U. The coincidence of the timing of marriage and entry into the labour market in individuals' life cycles generates a peak for the 10-25 age group in the age-mobility curve, when migrant move from rural to urban and urban to urban areas. This peak occurs in older age groups in the case of rural to rural and urban to rural movements (Figure 1). More than 40 percent of migrants, irrespective of gender and direction of move, were 25-44 years old at the time of the survey. About a quarter of urban to urban moves were in 10-24 years age group, presumably either to accompany parents or to find a job at a new urban destination. In the case of rural to urban migration, the proportion of this age group was also substantial. Approximately 30 to 35 percent of male-rural to rural and urban to rural movers were older than 55 years (Appendix Table 1).

Figure 1
Percentage distribution of migrant population by age
and direction of move



Source: PSES 2000-01

Table 5 presents data on distribution of migrants by their level of educational attainment. More illiterate persons moved towards the rural direction than the literate persons. For example, among the rural-rural migrants 75 percent were illiterate while this percentage was only 26 in the case of urban-urban migration. More than half of rural-urban migrants were literate. Urban areas attracted relatively more qualified persons. Among urban-urban movers, more than one-quarter had a higher level of education. Higher level of education refers to more than 10 years of education. One-third of rural-urban migrants had at least 10 years of education. In contrast, only 5 percent of rural-rural migrants had this level of education. 'This pattern of human-capital flow – the young and the better educated to urban centres and the illiterates to rural areas – has been noted by various researchers in different settings too' (Irfan, 1986).

Table 5

Percentage Distribution of Migrants by Migrants' Level of Educational Attendant

Migration direction	Level of migrants' educational attainment					
	Illiterate	Primary	Middle	Matric	Higher	All
Urban-Urban						
Male	11.9	22.9	15.2	19.3	30.7	100.0
Female	38.5	16.3	8.0	14.1	23.0	100.0
Total	26.4	19.4	11.3	16.4	26.5	100.0
Urban-Rural						
Male	36.7	17.1	18.8	16.1	11.4	100.0
Female	56.8	18.6	4.2	14.6	5.8	100.0
Total	49.8	18.1	9.3	15.1	7.7	100.0
Rural-Urban						
Male	30.6	21.9	14.1	16.0	17.4	100.0
Female	62.7	12.8	7.9	12.0	4.6	100.0
Total	47.0	17.3	11.0	13.9	10.9	100.0
Rural-Rural						
Male	56.8	26.8	7.6	6.9	1.9	100.0
Female	85.0	10.4	2.4	1.7	0.5	100.0
Total	75.4	16.0	4.2	3.5	1.0	100.0

Source: PSES 2000-01

Table 6 presents data an occupational distribution and average earnings of employed persons in two categories, non-migrants and in-migrant. Majority of employed persons in non-migrant households was engaged in agriculture, followed by elementary occupational (unskilled) and service sectors. In-migrants, the main category of internal migrants, were engaged in elementary, agriculture and craft related work. In terms of earnings, in general in-migrants were slightly better than non-migrants.

In the PSES, information was also collected about remittances. However, estimation of domestic remittances is a formidable task. The data may suffer from reporting errors in addition to being unrepresentative. The problems are more relevant for remittances generated through internal migration than for remittances from abroad. Special surveys can produce better information on remittances. With these limitations of data, an attempt has been made to estimate domestic remittance received by *out-migrant* households during the year preceding the survey. On average these household received Rs.8088 during this year. The amount received by rural households was more than four times the amount received by urban households. On monthly basis, rural households received less than one thousand rupees. It is very difficult for these households to make significant improvement in there lives as we expect from foreign remittances.

Table 6
Percentage Distribution of Employed Population by Migration Status and Average Monthly Earnings (Rupees)

Occupation	Non-migrants		In-migrants*	
	% distribution	Earnings (Rs)	% distribution	Earnings (Rs)
Professional workers	7.5	10,315	13.6	100,252
Clerical workers	2.5	5,965	3.6	10,417
Service workers	12.5	5,593	14.8	6,992
Agriculture workers	32.5	6,093	17.6	5,938
Craft workers	11.1	5,344	16.8	7,219
Plant & machine operator	5.8	6,269	4.1	6,161
Elementary occupation	28.0	4,138	27.4	4,255
All	100	5,727	100	6,674

Source: PSES 2000-01. *In-migrants and return-migrants from within country only.

6. INTERNAL MIGRATION AND HOUSEHOLD WELL-BEING

As noted earlier, this study has measured the well-being of migrant and non-migrant households by three indicators, household consumption on food and non-food items, infant mortality and child malnutrition. It has been argued earlier that overall effects of internal migration on these indicators may not be substantial primarily because of the dominance of migration towards rural areas, where employment opportunities are limited and wages are low. Thus even a long stay at the rural destination may not be effective for the well-being of migrating households.

6.1. Household Consumption

The PSES contained a consumption module. Utilizing this module, an analysis of the consumption pattern for migrant and non-migrant households was carried out, and the results are presented in Table 7. The per capita monthly expenditures are classified in into food and non-food items. Per capita total expenditures have also been reported in this table. The non-food items consist of housing, clothing, education, health, transport and recreation. Expenditures on consumer durables are not included in the non-food expenditures. The difference in average expenditure was found between rural and urban households, being higher in the later for all categories of migrants as well as non-migrants. No real difference between non-migrant and internal migrant households could be found in food or non-food per capita expenditure. Even in rural areas, average per capita consumption in-migrant households was lower than in non-migrant households. Household expenditure depends directly on income or other cash transfers, but it has been discussed earlier that remittance flows to out-migrant households were low, and average earnings of migrants and non-migrant households were not different. It appears from this analysis that while migration towards urban areas help improving the quality of life measured by household consumption, it is not true for rural to rural migration.

Table 7
Per Capita Monthly Food, Non-Food and Total Expenditure by Migration Status and Rural-Urban Areas

Migration Urban/Rural	Food		Non-food		Total	
	Mean	SD	Mean	SD	Mean	SD
Non-migrants						
Urban	554	324	1,172	1,163	1,716	1,954
Rural	494	292	426	449	917	647
Total	509	302	611	1,012	1,115	1,175
Immigrant within country						
Urban	586	409	1,225	1,289	1,810	1,582
Rural	450	176	396	292	843	379
Total	531	342	893	1,093	1,422	1,334
Return migrants within country						
Urban	533	296	1,826	4,892	2,267	5,020
Rural	505	237	768	1,076	1,249	1,174
Total	511	252	1,016	2,588	1,492	2,691
Out-migrants within country						
Urban	519	301	1,038	994	1,557	1,263
Rural	524	285	526	583	1,055	826
Total	523	287	612	687	1,131	923

Source: PSES 2000-01

6.2. Infant Mortality

Table 8 presents data on infant mortality rates for children belonging to migrant as well as non-migrant households, controlling for rural and urban areas. In-migrant and return migrant households have been combined in this table as well as in the subsequent analysis. For justification of this combined category, see Irfan, Demery and Arif (1983). In urban areas infant mortality was slightly lower in migrant households than in non-migrant households. But in rural areas, infant mortality was higher in migrant households than in non-migrant households. The nature of rural to rural migration has not been extensively researched in Pakistan. It is beyond the scope of this study to do in-depth analysis on rural-rural migration. But it is evident from the migrant profile presented in the previous section that three-quarters of rural-rural migrants were illiterate and they are likely to be landless who move around in search of job or working on the land of others. They may not earn sufficient resources to access health services for their children. So, infant mortality is higher among rural migrants than among non-migrant families in the countryside.

A multivariate analysis has also been carried out for the identification of covariates of infant mortality including migration status of households. Cox's proportional hazards model for identification of covariates, which had a stronger relationship with the survival probabilities of the sampled children, was employed on the PSES data set.[6] The explanatory variables were grouped into four categories:

[6] The general form of this model is: $h_x(t) = h_o(t)\, C_x$, where $h_0(t)$ denotes baseline hazard function, x denotes a set of characteristics, and C_x is a multiplier specific to persons. The model used takes into

demographic factors, socio-economic factor, environmental factors and locational factors. Operational definitions of the explanatory variables used in the hazard model are given in Table 9 with results. Three models have been estimated. Model 1, which is the full model, includes all the sampled children. Models 2 and 3 are estimated by focusing on rural and urban areas respectively. Results are expressed in the form of relative risk. Although migration status did not turn out to be statistically significant in these models, children of rural migrant households were relatively at greater risk of dying before the age of one.

Table 8
Infant and Child Mortality by Migration Status and Rural-Urban Areas

Urban/Rural areas	Non-migrant	In-migrant	Out-migrant
All areas	78	75	85
Rural areas	84	95	94
Urban areas	64	57	-

Source: 2000-01 PSES.

What are the other factors that affect the probability of dying. In the full sample, gender and birth order did not show any significance with the risk of dying. Results show that the other two demographic variables included in the model, birth interval and survival status of the previous child, turned to be statistically significant. Children born at an interval to one year were at the greater risk of death compared to children born 3 to 4 years apart. Death of the previous child increases the risk of dying of the newly born child before his/her first birthday.

Children born to mothers who at the time of survey were using contraception were less likely to die than children born to mothers who either had never used family planning or who had used in the past. The higher number of infant deaths amongst the non-users can be explained by the greater number of children born at shorter birth interval with a greater risk of death. It is well established that the use of family planning increases with the age of the mother, who have attained their desired family size. Mother's education is correlated with child survival. Children of mothers who had matriculated (10 years of schooling) were 0.41 times less likely to die than children whose mothers had no education. There was no statistically significant difference between infant mortality probabilities of mothers who had attended school up to middle level (8 years schooling) and those who received no education. In Pakistan unhygienic living conditions are a major source of spreading infection diseases. Children are relatively more likely subgroup to be contacted by these infections in the neonatal period as well as the post-neonatal period. The variables used for measuring the household's hygienic environment were the type of toilet used, piped water inside the dwelling unit and garbage collection system. Only one variable, toilet with any type of flush system had an independent effect on child survival. In other words, association

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account the multiplicative effect of the explanatory variables on the hazards function and includes the censoring and the failures. In view of the non-negativivity of h_x, the functional form used in the present study was the exponential:
$h_x(t) = h_0(t) \exp (b_1x_1 + b_1x_1 \ldots\ldots + b_n x_n)$.

of child death with unhygienic living conditions was positive. Apparently in terms of child survival, sanitation seems to be more important than water supply. Sanitation facilities are not likely to be available to poor rural migrant families.

Table 9
Relative Risk of Dying Before the First Birthday: Proportional Hazard Models

Covariates	Total	Urban	Rural
Demographic Factors			
Child sex	1.046	1.001	1.059
Birth order of child			
1	-	-	-
2	1.064	1.072	1.047
3	1.094	1.241	1.028
4+	1.102	0.885	1.167
Birth interval (previous child)			
First child	0.914	1.160	0.851
≤ 1 year	-	-	-
2 years	0.782*	0.855	0.779**
3 years	0.446*	0.499*	0.441*
4+ years	0.297*	0.403*	0.271*
Survival status of previous child (dead=1)	2.461*	2.346*	2.445*
Mother's age at the time of birth (years)	1.007	1.007	1.007
Socio-economic Factors			
Mother's Education			
No	-	-	-
Primary	1.178	0.939	1.265
Middle	0.855	1.036	0.572
Matric and higher	0.381*	0.317*	0.541
Use of contraception (current use=1)	0.772*	0.766	0.785
Women headed household (women=1)	1.100	0.699	1.205
Electricity connection (yes=1)	0.862	1.249	0.837
TV (yes =1)	1.093	0.849	1.251
Environmental Factors			
Piped water inside house (yes=1)	1.095	1.046	1.186
Toilet with any type of flush system (yes=1)	0.897	0.858	1.893
Locational Factors			
Place of residence (urban=1)	0.988	-	-
Province of residence			
Punjab	-	-	-
Sindh	0.862	0.552*	1.013
NWFP	0.617*	0.638	0.602*
Balochistan	1.028	0.829	1.182
Migration status	-	-	-
Non-migrant	-	-	-
In-migrant	1.022	0.941	1.110
Out-migrant	1.239	0.000	1.416

Source: 2000-01 PSES. * shows significance at 5 percent or low level of confidence.
** shows significant at 10 percent or lower level of confidence.

6.3. Child Nutrition

Table 10 presents data on child nutrition (underweight and stunting) by migration status of their households controlling for rural and urban areas of the country. Differentials in children's malnutrition levels do not vary by migration status of the households. In rural areas, more children of migrant households were malnourished than children of non-migrant households. Like infant mortality, a multivariate analysis has also been carried out to analyze the determinants of child malnutrition, measured by z-scores of eight-for-age and height-for-age, which have been used as the dependent variables in the OLS regression. Results are presented in Table 11.[7] Ironically migration has negative and significant impact on the nutritional status of children (stunting). This may be primarily due to the settlement pattern of migrants at a large scale in different rural areas of the country. There is a need to study it further by looking into the direction of movement and its impact on the well-being of migrant families.

With respect to other variables, no gender bias is observed either for underweight or for stunting. The absence of any significant gender effect is consistent with findings of other recent studies in Pakistan (World Bank, 2002; PIDE, 2004; Ibrahim, 2004). The child age coefficients (age and age^2) imply that nutritional status of children first declines, probably until about 3 years of age, and then increases. These findings are also consistent with other recent studies (Alderman and Garcia, 1994, World Bank, 2002; PIDE, 2004). Mother's age at the time of birth is significant and positively associated with the nutritional status of children (stunting and underweight), suggesting that the marriages of women at young ages may be detrimental to the child growth. Mother's education (at least primary) has a positive and significant effect on children's nutritional status, but father's education is not significant. It has recently been investigated that how mother's education influences the child health (weight-for-age and/or height-for-age). Handa (1999) argues that mother's education helps to understand how to manage nutrition and disease most effectively, and increases the knowledge of appropriate sanitary behavior. Education also influences other socio-economic characteristics like the age at which women marry, the number of children they have, and their status within the community. A correlation of education with unobserved household heterogeneity such as taste, knowledge of symptoms of illness and health, and food preparation methods have also been discussed in the literature. Finally, education allows women to process information from media (television) more efficiently and to identify better quality health care.

[7] The values of R^2 are low, however, the *F*-statistics indicate a high level of overall significance. In a cross-section data, as is the case for the present study, low R^2 value may occur even if the model is satisfactory, because of the large variation across individual units of observation, as has been observed in many recent malnutrition studies (Handa, 1999; World Bank, 2002).

Table 10
Child Nutrition by Migration Status

Migration status	Rural areas	Urban areas	All areas
Underweight			
Non-migrant	50.3	41.1	47.6
In-migrant	54.2	43.6	48.6
Out-migrant	60.0	-	54.5
Stunting			
Non-migrant	52.4	43.6	49.9
In-migrant	53.9	43.4	48.4
Out-migrant	46.7	20.0*	44.0

Source: PSES 2000-01.
* based on small number of cases

Table 11 shows that having access to flush toilet has a significant positive effect on the nutritional outcome of children perhaps due to smaller incidence of diseases. This variable contributes to a healthier environment by reducing exposure to pathogens (Esrey et al., 1985). *Pakka* (cemented) residential house also has a positive and significant impact on height-for-age indicator of the nutritional status of children. Child health is not correlated significantly with urbanization, however, provincial differences do exist. For example, children from Sindh are more likely to be underweight as compared to the children from Punjab. In terms of general nutrition, weight-for-age, children from NWFP seem to be better than children from other provinces. In height-for-age (stunting), children from Punjab are better than children from other provinces. The distance to the nearest health facility is also included in the analysis to measure access to health care services. Long distance to health facility is negatively associated with nutritional status of the children. In-migration has a negative impact on nutritional status of children.

Table 11
Correlates of Child Malnutrition

Correlates	Underweight	Stunting
Log per capita expenditure	0.253*	0.099
Child sex	-0.868	-0.126
Child age	-0.063*	-0.044*
Child age2	0.001*	0.001*
Mother age at the time of birth	0.014*	0.016*
Ever breastfeeding	0.115	0.005
Child immunization	-0.097	0.042
Mother's education	0.165*	0.461*
Father's education	0.039	-0.012
Working status of mother	0.030	-0.125
Father's occupation	0.103	0.093
Family size	-0.002	-0.009
House type	-0.016	0.314*
Electricity	0.114	0.050
Persons per room	-0.003	-0.021
Telephone	-0.066	0.165
Piped water	-0.098	-0.068
Toilet with flush	0.148**	0.238*
Drain underground	-0.016	0.071
Distance	-0.016*	-0.014**
Place of residence	0.094	-0.141
Balochistan	0.013	-0.459*
Sindh	-0.378*	-0.103
NWFP	0.280*	-0.200*
In-migrants	-0.055	-0.211*
Out-migrants	-0.344	0.137
Constant	-3.143*	-2.254*
R^2	0.060	0.063
F-stat	8.051*	7.030*
N	2877	2638

Source: PSES 2000-01

* Statistically significant at the 0.5 level; ** Statistically significant at the 0.1 level.

7. SUMMARY

The existing data base on migration in Pakistan in general and particularly on internal migration is not very satisfactory. The 1998 census only provides information on life-time migration (place of birth and present residence), even without classification of place of birth into rural and urban areas. Some rounds of the LFS carried out in the 1990s contain data on place of birth for population 10 years and above, but making it difficult to measure the total volume of internal migration. The 1998-99 PIHS has a small module on migration including place of birth and reasons for migration. This study has used the 2000-01 PSES dataset to analyze the impact of internal migration on household well-being. The PSES contains a comprehensive migration module applied to all members of the sampled households.

The analysis was carried out in two stages; firstly it examined the incidence and directions of movement of migrant population. Reasons for migration and some socio-demographic characteristics were also analyzed. Results show that 12 percent of the total population consists of migrant population. The data on lifetime migrants produced by the PSES is consistent with other sources, despite some definitional differences. Majority of in-migrants moved to rural-urban and rural-rural directions. Urban to urban migration was also significant. Male migrants, particularly to rural-urban direction, changed their place of residence for economic reasons while female migration was primarily for non-economic reasons. However, about one-sixth of rural-urban female migrants moved because of some economic reasons. Migrants are in general young and better educated. But there are variations according to the direction of move. Age and education profile of rural-urban migrants was different particularly from rural-rural movers. The former were relatively younger and more educated than the later. In terms of occupation, migrants were engaged in low paid jobs and their earnings were almost equal to the earnings of non-migrants.

At the second stage this study used the migration status of the head of households to differentiate between migrant and non-migrant households in order to examine the impact of internal migration on the well-being of concerned families. Well-being was measured by per capita consumption, infant mortality and child malnutrition. No real difference could be found between migrant and non-migrant households in these indicators, although urban population was better off than the rural population. The multivariate analysis shows the poor socio-economic condition of rural-rural migrants. However, many questions are left unanswered. For example, why rural-rural migrants could not improve their standard of living after migration? Why migrants' children were more malnourished (stunted) than the children of non-migrant households? These questions require some knowledge about the pre-migration conditions of the migrating households. Rural-rural migrants are not in general educated or skilled or semi-skilled. These migrants moved to other rural areas in search of land-based opportunities. Their destinations could be primarily fertile plain areas in Punjab and Sindh, where tenurial pattern has changed over time. Farm area operated by land owners has increased over time, and a decline in sharecropping has also been observed. Thus land-based better economic opportunities may be very limited for rural migrants at their destinations. It may have an adverse impact of their well-being.

However, it is likely that these migrating households have improved their socio-economic conditions as compared to their pre-migration condition. It is suggested that some case studies may be designed to study the rural to rural migration as a major coping strategy for poor people to earn a livelihood. In these case studies, qualitative research may be combined with the quantitative surveys to better understand the migration phenomenon in rural areas.

APPENDIX

Table 1
Percentage Distribution of Lifetime Migrants by Direction of Move Gender Age

Migration direction	Age groups								
	0-<5	5-9	10-24	25-34	35-44	45-54	55-64	65+	All
Urban-Urban									
Male	0.2	0.2	28.8	10.5	23.3	16.4	10.1	10.5	100.0
Female	2.1	0.0	21.4	28.2	21.6	20.0	3.4	3.4	100.0
Total	1.2	0.1	24.8	20.2	22.3	18.0	6.5	6.6	100.0
Urban-Rural									
Male	3.6	3.0	16.3	17.9	22.1	8.8	10.8	17.5	100.0
Female	1.6	0.0	23.7	29.7	18.5	14.2	7.8	4.5	100.0
Total	2.3	1.1	21.1	25.6	19.8	12.3	8.8	9.1	100.0
Rural-Urban									
Male	0.3	1.8	18.6	19.9	17.2	18.5	13.4	10.3	100.0
Female	0.9	1.9	26.2	20.3	19.9	17.1	7.8	8.0	100.0
Total	0.6	1.9	22.5	20.1	17.6	17.8	10.5	9.1	100.0
Rural-Rural									
Male	1.6	1.9	18.8	13.3	14.0	15.1	14.8	20.5	100.0
Female	0.8	1.4	15.9	22.4	24.7	14.3	12.4	8.0	100.0
Total	1.1	1.6	16.9	19.3	21.0	14.6	13.3	12.3	100.0

Source: PSES 2000-01

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